ABSTRACT

Non-volatile memory device, driver, and method is described that utilizes write or erase cycle tracking to interrupt or stop a non-volatile memory programming or erase operation at a selected point to interrupt/stop execution or simulate power loss at a specific point. This ability allows for a deterministic and repeatable testing process of all write or erase cycles of a non-volatile command where the state of floating gate memory cells are changed in the non-volatile memory device. Additionally, this ability to utilize write or erase cycle tracking to interrupt or stop a non-volatile memory programming operation or erasing operation at any selected point enables simulation of power loss at each point in a selected operation that a non-volatile floating gate memory cell is programmed or erased, allowing for improved, deterministic testing of the power loss recovery cycle and faster code/design change verification.